

Commonwealth of Kentucky
Division for Air Quality
COMMENTS AND RESPONSE
ON THE DRAFT PERMIT

Comments on the draft permit significant revision submitted by the court hearing officer collected on June 26, 2009 from few neighbors of the facility.

A copy of all the comments received is attached to the Response.

Comment on the draft permit, statement of basis and the application summary was submitted by J. Roger Reehl of URS Corporation for Cowboy Charcoal on April 17, 2009 and resubmitted August 5, 2009.

Comments made at the public hearing:

General comments fall into two issues: The increase of emissions, as proposed, creates an immediate health hazard to those surrounding property occupants as well as to their livestock and water supplies and fugitive emissions.

Division's response:

The Division disagrees.

- a- The facility's emissions (actual and potential) will be lowered under the new permit (F-05-042 R1) even after addition of briquets production and packaging units.*
- b- Two new buildings are proposed for construction for enclosure of the charcoal stock pile and the wood slab pile that significantly will reduce the fugitive emissions of charwood dust.*
- c- And, facility's wood charring ovens are designed with smoke re-circulating ducts that force the emissions/smoke back to the fire. Significant portion of pollutants are destroyed by fire before getting released from the ovens' stacks.*

General comments were made during the public hearing that did not specifically relate to the technical aspect of the air permit.

Division's response: *The division is only delegated the authority to enforce state and federal air regulations. The Division through the proposed permit implements air quality for control of regulated air pollutants.*

Air quality related complaints can also be addressed by contacting:

London Regional Office
875 S. Main Street
London, Kentucky 40741
(606) 330-2097

FACILITY'S COMMENTS:

1. DRAFT PERMIT F-05-042 R1

In table at the bottom change "Complete Date" for this permit revision to March 11, 2009, to be consistent with the date used on permit Cover Page.

Division's response: Comment acknowledged and the correction made.

2. Page 2 of 28: Emission Unit 01: Direct heat wood Carbonizing Ovens

Under "Applicable Regulation, 1. Operating Limitation", revise 39,475 to 39,510 ton per year, which correlates to the value used in the permit application and calculations.

Division's response: Comment acknowledged and the correction made.

3. Under "APPLICABLE REGULATIONS, 3. Testing Requirements, (a)", delete the words "particulate and", and delete "Method 5" reference. See following for explanation.

Under "APPLICABLE REGULATIONS, 3. Testing Requirements, (b)", eliminate this paragraph "(b) that requires another performance test for PM within six months of permit issuance. We have though we have understood from previous conversations and meeting with Massoud that the ovens recently tested February 6-7, 2007, would not be required to have a Method 5 retest for PM due to this permit revision application. We have previously justified that such a retest should not be required, in our March 9, 2009 letter to your office, and we have not been provided a rebuttal to our argument. The March 9, 2009 letter is attached here for your convenience. Furthermore, in a February 12, 2009 meeting at the plant site with Massoud and his permitting associates, and Mr. David Shivel of the London Regional Office, the permitting associates and Mr. Shivel all understood and supported our reasoning that the ovens should not be required to retest. We need to understand the reasoning for requiring the retest as written at this paragraph "(b)".

Division's response: Division does not concur with the requested change. The stack test performed and results submitted on March 20, 2007, does not explain the difference between value of PM emission in AP 42 Table 10-7-1 (310 lb/ton) and the test result (0.037 lb/T for one unit oven, or 0.526 lb/T for fourteen ovens). The reliability of the testing is inconsistent and cannot be used at this time to validate the emission factors provided. Hence, the testing requirement in permit will not be changed.

4. Page 3 of 28: Emission Unit 01: Direct Heat Wood Carbonizing Ovens (continuation)

Under "APPLICABLE REGULATIONS, 4. Specific Monitoring Requirements, (b)" and at "5. Specific Recordkeeping Requirements, (a)", the references to "daily" monitoring and recordkeeping should be changed back to "monthly" basis. When the existing permit was issued in 2006, it was agreed that process monitoring and recordkeeping on a monthly basis was reasonable and appropriate for this source, and nothing is different now that would alter this conclusion. The plant's current ongoing monitoring and recordkeeping is organized on a monthly basis and has been performing fine.

Division's response: Comment acknowledged and the change made.

5. For your convenience, find attached to this correspondence a copy of this TAUW Infra test report, with the first page covering it being an excerpt from emission factor verification work done by Mr. Michael Erik in the 1990's when he was on your Permit Review Branch staff. The emission factors, in the units of pounds per ton of charcoal produced, for sulfur dioxide, nitrogen oxides, carbon monoxide, volatile organic compounds (VOC), and organic HAPs, have been historically used in permitting this emission unit, and continue to be the basis for declared emissions in this current application (except methanol emissions, conservatively based on AP-42, and added to the VOC emission factor).

The emission factor for PM derived from the TAUW Infra test report, historically used as the basis in permitting this emission unit, was 0.574 lb/T of charcoal product. The emission factor for PM derived from the site-specific February 6 - 7, 2007 source emissions performance test on oven stacks at this plant, currently used as the basis in permitting this emission unit, was 0.526 lb/T of charcoal product (prior to adding a 50 percent cushion). The fact that these two PM emission factors derived from separate stack tests are well within 10 percent difference from each other demonstrates that the oven PM emissions have been well defined.

Furthermore, the consistency of these PM emissions data would appear to lend credibility to the test data for the other pollutant emissions measured by the manufacturer's 1991 source test conducted by TAUW Infra, and historically used in permitting this emission unit. The measured emissions for these other regulated pollutants and organic HAPs, even when including these emissions facility-wide, are well below emissions thresholds of concern (100 T/yr, and, for HAPs, 10 T/yr individually, and 25 T/yr in total). We therefore believe that expending valuable resources for further testing of these pollutant emissions, uncontrolled in nature, is not warranted in this case.

Division's response: Division does not concur. See the response to comment #3.

6. Under "Description, Maximum Continuous Rating", revise the value 10,987 to 25,000 tons per year, to correlate with the value in the permit application, as Massoud has acknowledged in the "Statement of Basis".

Under "Description, Control Device", delete the phrase "additional fabric filter 2006." This additional fabric filter, voluntarily proposed in the 2006 application (to be exhausted inside the building), has not been needed. The improved emission reduction of the source, as a result of the rebuild after the 2008 fire damage, can be confirmed by contacting Mr. David Shivel of the London Regional Office. The current permit application does not include the additional baghouse, and reference to it in this permit should be eliminated.

Division's response: Comment acknowledged and the change made.

7. Under "APPLICABLE REGULATIONS, 1. Operating Limitations", revise the value of 4.12 lb/yr as this PM emission limitation cannot be correct. The 4.12 value has apparently been derived by Massoud, by applying the 59:010 Appendix A equation to a process weight value of 1.25 T/hr, which is not valid. This invalid 1.25 T/hr value was apparently derived by Massoud, by dividing the erroneous annual production of 10,987 tons by 8760 hours per year. Even though 25,000 tons is the correct annual production restriction (see discussion above), the short-term process weight rate capacity, existing and proposed, is 10 T/hr, rather than derived by dividing 25,000 T/yr by 8760 hours. Therefore, the correct allowable for PM is calculated to be 14.97 lb/hr, as follows:

$3.59 (10 \text{ T/hr})^{0.62} = 14.97 \text{ lb/hr}$

Division's response: Division disagrees, since the annual process rate should be considered for the allowable emission, and the corrected value is $3.59 (25000/8760 \text{ T/hr})^{0.62} = 6.97 \text{ lb/hr}$

8. Under "APPLICABLE REGULATIONS, 3. Testing Requirements, (a)", delete the words "particulate and", and delete "Method 5" reference. See following for explanation. Under "APPLICABLE REGULATIONS, 3. Testing Requirements, (b)", this paragraph (b) should be eliminated. The previously issued permits, August 2006 and before, have not had cause to require the stack from this small dust collector to be tested, and nothing has changed to the negative that would indicate the need for expending valuable time, expense and resources for such testing. Routine maintenance is provided to the equipment, and the visible emissions evaluations are conducted and recorded at the required routine. The adequate performance of this equipment can be confirmed by contacting Mr. David Shivel of London Reg. Office. Cowboy Charcoal requests that this condition be eliminated.

Division's response: Division does not concur. Pursuant to 401 KAR 50:045, Section 1, the cabinet may require the owner or operator of an affected facility to sample emissions in accordance with methods approved by the cabinet. Also, the reliability of the past testing report; does not satisfy the requirements of 401 KAR 50:055, the permit language will not be changed.

9. Page 5 of 28: Emission Unit 03: Screening and Bagging (continued). Under "APPLICABLE REGULATIONS, 4. Specific Monitoring Requirements, (b)" and at "5. Specific Recordkeeping Requirements, (a)", the references to "daily" monitoring and recordkeeping should be changed back to "monthly" basis. When the existing permit was issued in 2006, it was agreed that process monitoring and recordkeeping on a monthly basis was reasonable and appropriate for this source, and nothing is different now that would alter this conclusion. The plant's current ongoing monitoring and recordkeeping is organized on a monthly basis and has been performing fine.

Division's response: Comment acknowledged and the change made.

10. Pare 6 of 28: Emission Unit 04, Emission Unit 06, and Emission Unit 07 Under "Emission Unit 04, Bulk Charwood Load-out Operation, Description, Equipment Includes:" delete the words "loading hopper, conveyor, and". This unit has been simplified to the one indication operation, Loading Truck. This has been described in the permit application, as Massoud has indicated in the Statement of Basis.

Under "Emission Unit 06, Charwood Stockpile Operation, Description, Maximum Continuous Rating", revise the value 10,987 to 25,000, and revise tons/hr to the correct tons/yr, to correlate with the value in the permit application, as Massoud has acknowledged in the "Statement of Basis".

Under "Emission Unit 06, Charwood Stockpile Operation, Description, Construction Commenced", revise the end of sentence from "2 January 009" to "January 2009."

Under "Emission Unit 06, Charwood Stockpile Operation, Description, Control Device", revise "water spray" to "Building". Note that wetted, damp charcoal is spontaneously combustible and presents an extreme fine hazard. Water spray has not been claimed in permit application, and should obviously be deleted from permit.

Under “Emission Unit 07, Wood Screening & Handling Operation, Description, Equipment Includes”, revise to read “Receiving hopper, chopsaws, screening, wood block storage, and sawduct collection.”

Under “Emission Unit 07, Wood Screening & Handling Operation, Description, Maximum Continuous Rating”, revise the value 39,475 to 39,510 which correlates to the value used in the permit application and calculations.

Under “Emission Unit 07, Wood Screening & Handling Operation, Description, Control Device”, delete the label “Control Device” and then delete the phrase “Water Spray”. Note that the charcoal ovens utilize dry wood input, and the wood slabs raw material are dried as a part of the wood raw material preparation. Wetting the wood defeats the purpose of drying it. Water spray was not claimed in the permit application, and should obviously be deleted from the permit.

Under “APPLICABLE REGULATIONS, 1. Operating Limitations”, revise the value 39,475 to 39,510 tons/yr, and add the phrase “process dry wood basis” for clarity, which correlates with the basis defined in the permit application.

Division’s response: Comment acknowledged and the changes made.

11. Pa2e 7 of 28: Emission Unit 04, Emission Unit 06, and Emission Unit 07 (continued)

Under “APPLICABLE REGULATIONS, 4. Specific Monitoring Requirements, (b)” and at “5. Specific Recordkeeping Requirements, (a)”, the references to “daily” monitoring and recordkeeping should be changed back to “monthly” basis. When the existing permit was issued in 2006, it was agreed that process monitoring and recordkeeping on a monthly basis was reasonable and appropriate for this source, and nothing is different now that would alter this conclusion. The plant’s current ongoing monitoring and recordkeeping is organized on a monthly basis and has been performing fine.

Division’s response: Comment acknowledged and the change made.

12. Page 8 of 28: Emission Unit 04, Emission Unit 06, and Emission Unit 07 (continued)

Under “APPLICABLE REGULATIONS, 7. Specific Control Equipment Operating Conditions”, delete paragraphs (a), (b) and (c), and replace with “None”. The previous 2006 permit regarding these emission units 04, 06 and 07 stated “None under this Condition 7, and we believe this should continue since there are no control equipment.

Division’s response: Comment acknowledged and the permit has been amended as such.

13. Page 9 of 28: Emission Unit 08, Haul Roads

Under “Description”, at “Year Constructed”, Massoud has stated “need original date”. To answer, your office did not require Haul Roads to be included during previous permitting events in the 1990’s. Haul Roads were first included as an emission unit at the time of the previous permit issued August 24, 2006.

Page 10 of 28: Emission Unit 08, Haul Roads (continued)

No comments

Division’s response: Comment acknowledged.

14. Page 11 of 28: Emission Unit 09: Charcoal (Hardwood Sawdust) Briquetting Plant Under “APPLICABLE REGULATIONS, 1. Operating Limitations”, revise (11 T/hr) to (1.1 T/hr).

Division’s response: Comment acknowledged and correction made.

15. Under “APPLICABLE REGULATIONS, 3. Testing Requirements, (a)”, delete the words “particulate and”, and delete “Method 5” reference. See following for explanation. Under “APPLICABLE REGULATIONS, 3. Testing Requirements, (b)”, this paragraph (b) should be eliminated. The previously issued permits, August 2006 and before, have not had cause to require the stack from such a small, insignificant dust collector to be tested, and nothing has changed to the negative that would indicate the need for expending valuable time, expense and resources for such testing. Routine maintenance is provided to the equipment, and the visible emissions evaluations are conducted and recorded at the required routine. The adequate performance of this equipment can be confirmed by contacting Mr. David Shivel of London Reg. Office. Cowboy Charcoal requests that this condition be eliminated.

Division’s response: Division does not concur. See response to comment # 8

16. Page 12 of 28: Emission Unit 09: Charcoal (Hardwood Sawdust) Briquetting Plant (continued).

Under “APPLICABLE REGULATIONS, 4. Specific Monitoring Requirements, (b)” and at “5. Specific Recordkeeping Requirements, (a)”, the references to “daily” monitoring and recordkeeping should be changed back to “monthly” basis. When the existing permit was issued in 2006, it was agreed that process monitoring and recordkeeping on a monthly basis was reasonable and appropriate, and nothing is different now that would alter this conclusion. The plant’s current ongoing monitoring and recordkeeping is organized on a monthly basis and has been performing fine.

Division’s response: Comment acknowledged and change made.

17. Page 13 of 28: Emission Unit 10: Charcoal (Hardwood Sawdust) Briquettes Packaging Under “APPLICABLE REGULATIONS, 3. Testing Requirements, (a)”, delete the words “particulate and”, and delete “Method 5” reference. See following for explanation.

Under “APPLICABLE REGULATIONS, 3. Testing Requirements, (b)”, this paragraph (b) should be eliminated. The previously issued permits, August 2006 and before, have not had cause to require the stack from such a small, insignificant dust collector to be tested, and nothing has changed to the negative that would indicate the need for expending valuable time, expense and resources for such testing. Routine maintenance is provided to the equipment, and the visible emissions evaluations are conducted and recorded at the required routine. The adequate performance of this equipment can be confirmed by contacting Mr. David Shivel of London Reg. Office. Cowboy Charcoal requests that this condition be eliminated.

Division’s response: The Division does not concur. See response to comment # 8

18. Page 14 of 28: Emission Unit 10: Charcoal (Hardwood Sawdust) Briquettes Packaging (continued).

Under “APPLICABLE REGULATIONS, 4. Specific Monitoring Requirements, (b)” and at “5. Specific Recordkeeping Requirements, (a)”, the references to “daily” monitoring and recordkeeping should be changed back to “monthly” basis. When the existing permit was issued in 2006, it was agreed that process monitoring and recordkeeping on a monthly basis was reasonable and appropriate, and nothing is different now that would alter this conclusion. The plant’s current ongoing monitoring and recordkeeping is organized on a monthly basis and has been performing fine.

Division’s response: Comment acknowledged and change made.

19. PAGE 15 OF 28: INSIGNIFICANT ACTIVITIES:

T(w)o Insignificant Activity No. 2, add an additional second fuel oil tank, as follows:

Division’s response: Addition of units after public comment should be done through new revision.

20. Page 16 of 28: “Section D — Source Emission Limitations and Testing Requirements” Under item 3 revise the value 39,475 to 39,510, for the reason previously discussed.

Division’s response: Comment acknowledged and change made.

21. Comments/Corrections to Permit Application Summary Form: Cowboy Charcoal/Albany

First Page:

Under “Application Type! Permit Activity! Permit Modification”, the “Administrative” blank needs to be checked to account for the name and ownership change.

Division’s response: Comment acknowledged and change made.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the United States Environmental Protection Agency promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.